Specific Measurements	Future Project Steps	Future Collaboration
They are only able to test for solid medium. The fish oil doesn't have much cadmium. The only other route for cadmium that is not the fishmeal is the sea water that is returned to the sea. Marco's mapping project is delayed for reasons. He has a lot of data. No mapping from last season. The release of data needs to be discussed. Most of the data they have is that of mapping out concentration of Cadmium in concordance to the fishing zone. Cadmium levels have gone up in the south. The greater the influence going out into the ocean, the greater the Cadmium levels. Mining has a great impact on the levels of Cadmium found in the ocean. The fat of the fish is one of the most valuable parts of the fish meal. European fishmeal company (triple 9 ?) that separates the fat to take out heavy metals and then it incorporates the fat. Too much for TASA, this is like another factory. It would be interesting to have moisture levels throughout the process.	We need to figure out if we can get the results before arriving at the factory. Some information from the tests can be acquired remotely. More specific things are available on arrival to the plant. Talk to the fishermen to see if they are comfortable. Maybe we can send a questionnaire.They already measure certain things, used to taking tests. They will be needing to compare the results to a certified lab in order to ensure that there are no false positives or negatives. The Best place for the test is on the boat since data can be gathered regarding cadmium levels. The cadmium is on the fat of the fishmeal. They test 5% of all production. If the test comes to be low, they stop testing. If the test comes to be high, they keep on testing. Cadmium levels drop after the first days of productions. Test for different fish conditions, both humid and dry to understand if the fishmeal	WE NEED TO GET AN EMAIL OUT ASAP AS WELL AS THE SURVEY FOR THE FISHERMEN. New meeting with TASA in around four weeks. Maybe working with universities that have testing methods for heavy metals. Cayetano, Agraria, Uni.

Moisture level of fishmeal; 7-8% is the ideal. The regulation for the levels of Cadmium allowed in order to be sold depend on the location to which it is being sold. Time in the fish pits varies. 3 Stages. 1. capture the fish, then unload the fish to the fish pits. 2. cook once unloaded. 3. The rest around 3h. 4 tones of fish = 1 tone of fishmeal, not sure, rough estimate. There is a 9h-15h time period from where the fish is caught, until when it is cooked. Fish badges could be allocated by concentration of cadmium, fish pits If you release the fish they die. However detecting for cadmium in itself adds value. Pisco upwards, very shallow, boats can not go too close to the coast. Pumps. Juveniles should not be fished as they sustain the population. Fish adults. Eco sound to locate the fish. If you fish a certain percent of juveniles, the government	would detect the levels of Cadmium. Figure out the distribution of cadmium during the process. The idea is to know the levels of Cadmium before unloading. Each fish pit will have a different raw material with different levels of Cadmium. There is not a loss of Cadmium during the process. The dip stick must be able to determine the amount of Cadmium in the sample, not just a turn on - off system. It should glow with 0.5 ppm. The shaking incubator would take about 20 hours. Instead, the dip stick takes about four hours in theory. The deep stick should give cadmium concentration. Cadmium is not a problem unless there is more than 2 ppm.	

mandates for the fishing season to come to an end. --- Fish are being pumped into the boat, as there are tons of fish trapped in the nine meter nts. --- Adult fish dive deeper into the ocean, as a Kelvin wave with higher temperatures came in. --- They are able to fish for a Biomass of 80 million --- Fishing zones start at 5 nautical miles from shore.		